

Product/Service Description Document
Proposed Changes to Wireless Emergency Alert Wording for Flash
Flood Warnings

October 1, 2019

Part I - Mission Connection

- a. Product/Service Description - The National Weather Service (NWS) is collecting comments on the wording of Wireless Emergency Alerts (WEA) for Flash Flood Warnings (FFW) with the damage threat tags of "Considerable" or "Catastrophic". The new Impact-Based Warning format for FFWs includes machine-readable tags to characterize the flash flood damage threat, source information, and causative event.

Characterization of the flash flood damage threat allows NWS to issue WEAs for those warnings with "Considerable" or "Catastrophic" tags. The text of these alerts reflects the severity of the threat by including flash flood emergency language where warnings tags indicate "Catastrophic" damage is likely.

- b. Product Type - Proposed Operational
- c. Purpose - This effort is a subset of the overall NWS Hazard Simplification (Haz Simp) project. This product enhances the NWS Flash Flood Services by characterizing the damage threat using machine-readable tags. With this change, NWS is aiming to improve the public response to flash flood warnings by issuing WEA alerts only for flash flood events that require immediate life-saving action, as indicated by a damage threat tag of "Considerable" or "Catastrophic".
- d. Audience - The target audiences for these products are customers and partners such as emergency managers, state and local officials including School Superintendents, Departments of Transportation (DOTs), media and the general public. These proposed changes affect all NWS Weather Forecast Offices.
- e. Presentation Format - These are 90 and 360 character messages in English and in Spanish that are disseminated to the Federal Emergency Management Agency's (FEMA) Integrated Public Alert and Warning System (IPAWS) for delivery to Wireless Emergency Alerts.
- f. Feedback Method - Feedback on the Proposed Examples for Impact-Based Warnings for Flash Floods (below) may be addressed to:

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Part II – Technical Description

- a. Format and Science Basis – NWS offices issue more than 4,000 FFWs each year for events with a range of impacts on lives and livelihoods. User perception is that NWS over-alerts flash flood warnings. FEMA has also noted a large number of complaints about WEA alerts for FFWs during overnight periods with perceived little impact. With this change, NWS is aiming to improve the public response to WEA alerts for those flash flood events that require immediate life-saving action.

The flash flood damage threat characterization will include:

- **Base** – Most flash floods, with the potential for impacts and damage.
 - **Considerable** – Flash floods capable of unusual severity of impact where urgent action is needed to protect lives and property.
 - **Catastrophic** – Exceedingly rare, violent flash floods which threaten lives and cause disastrous damage when floodwaters are placing or will place people in life-threatening situations by rapidly rising to levels rarely, if ever, seen. Catastrophic flash flood damage threat tags will only appear in FFWs which include flash flood emergency language.
- b. Availability – WEA is a joint effort between the Federal Communications Commission (FCC), the Federal Emergency Management Agency (FEMA), and the wireless industry that allows emergency alerting authorities to geographically target emergency messages to mobile devices, primarily cell phones. The NWS will provide messages to WEA for hazards believed to be life-threatening and that have consequences that can be mitigated or minimized by immediate action.

Proposed Examples for Impact-Based Warnings for Flash Floods:

A. Proposed WEA Messages for FFWs with a FLASH FLOOD DAMAGE THREAT tag of "Considerable":

English Message (Short)

NWS: FLASH FLOOD WARNING this area til 11:00AM EDT. Avoid flooded areas.

Spanish Message (Short)

SNM: AVISO DE INUNDACIONES REPENTINAS hasta 11:00AM EDT. Evite areas inundadas.

English Message(360 Characters)

National Weather Service: A FLASH FLOOD WARNING is in effect for this area until 11:00AM EDT. This is a dangerous and life-threatening situation. Do not attempt to travel unless you are fleeing an area subject to flooding or under an evacuation order.

Spanish Message(360 Characters)

Servicio Nacional de Meteorologia: AVISO DE INUNDACIONES REPENTINAS en efecto para esta area hasta las 11:00AM EDT. Esta es una situacion peligrosa y amenaza la vida. No intente viajar a menos que sea para abandonar un area propensa a inundaciones o bajo una orden de desalojo.

B. Proposed WEA Messages for FFWs with a FLASH FLOOD DAMAGE THREAT tag of "Catastrophic":

English Message (Short)

NWS: FLASH FLOOD EMERGENCY this area til 11:00AM EDT. Avoid flooded areas.

Spanish Message (Short)

SNM: EMERGENCIA DE INUNDACIONES REPENTINAS hasta 11:00AM EDT. Evite areas inundadas.

English Message(360 Characters)

National Weather Service: A FLASH FLOOD EMERGENCY is in effect for this area until 11:00AM EDT. This is an extremely dangerous and life-threatening situation. Do not attempt to travel unless you are fleeing an area subject to flooding or under an evacuation order.

Spanish Message(360 Characters)

Servicio Nacional de Meteorologia: EMERGENCIA DE INUNDACIONES REPENTINAS en efecto para esta area hasta las 11:00AM EDT. Esta es una situacion extremadamente peligrosa y amenaza la vida. No intente viajar a menos que sea para abandonar un area propensa a inundaciones o bajo una orden de desalojo.